

### **Remarks**

Claims 21-25 and 28-38 are pending in the present application. Reconsideration is requested in view of the following remarks.

Claim 33 was objected to for depending from a rejected base claim, but would be allowable if rewritten in independent form. Claim 33 has been rewritten in independent form including all of the limitations of the claim as previously presented and should now be allowed.

Applicants' attorney discussed the application in a telephone conference on February 20, 2006. It was agreed that the claims are allowable over the combination of references cited in the previous Office action.

The Information Disclosure Statement (IDS) filed August 25, 2005 has not been acknowledged by the Examiner. A copy of the IDS is enclosed. Applicants request consideration of the IDS.

#### **I. Rejection of Claims 21-24 and 28-31 Over Bergstein and Okushita**

Claims 21-24 and 28-31 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious from U.S. Patent No. 2,628,179 to Bergstein (Bergstein) and U.S. Patent No. 6,422,283 to Okushita et al. (Okushita). Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

##### **Claim 21:**

Claim 21 recites a method of forming a cutting edge on a dispensing carton comprising supplying a roll of tape to an application station, the tape having a polymeric backing coated with an adhesive on one side, applying a length of the tape to a length of carton board and laminating the tape to the carton board, and cutting the carton board and tape lengthwise to separate the carton board into carton blanks and form a cutting edge on each carton blank. Neither Bergstein nor Okushita (alone or in combination) teaches or suggests the method recited in claim 21.

In contrast to claim 21, Bergstein discloses a device for applying metallic strips to carton blanks, rather than a tape comprising a polymeric backing, as recited in claim 21. A primary advantage of forming the cutting edge from a polymeric tape instead of metal strips is that the polymeric material is not as sharp as and is less likely to cause injury to the consumer as metal.

See page 2, lines 5-7 of the application. Bergstein fails to recognize that polymeric tape can be a suitable alternative to metal strips and certainly does not appreciate any of the advantages of using such material.

Okushita does not make up for the deficiencies of Bergstein. Okushita, like Bergstein, does not teach or suggest supplying a roll of tape having a polymeric backing coated with an adhesive, applying a length of the tape to a carton board and cutting the board and the tape to form a cutting edge, as recited in Claim 21. Instead, Okushita teaches forming a cutter from a nonmetallic sheet S and thereafter adhering the cutter to carton board. See FIG. 6 and col. 8, lines 25-51.

In the rejection of claim 21, the action contends that it would have been obvious to use polymeric tape in the Bergstein method in view of Okushita “because Okushita et al. teach using such for a carton cutter instead of the art recognized metal alternative for improved wound prevention and incineration of the cutter.” Applicants disagree with this contention.

If anything, the teachings of Okushita undercut, rather than support, the presupposition that polymers can be used to form the cutting strips by the method disclosed in Bergstein. The prior art must be considered in its entirety, including disclosures that teach away from the claimed invention. MPEP § 2141.02. Teaching away from making the specific combination of elements recited in a claim is a demonstration that the reference teachings do not render the claim prima facie obvious. *See In re Fine*, 837 F. 2d 1071, 1074 (Fed. Cir. 1988). Bergstein teaches forming a cutting edge by applying a strip of metal to a carton and then cutting the metal and the carton to form a cutting edge, while Okushita emphasizes the importance of forming the cutter first and then transferring and applying the pre-formed cutter to the carton. For example, with reference to the FIG. 6 embodiment, Okushita states:

the sheet is successively fed between the upper and lower molds and cut thereby and the cutter thus formed is sucked and held by the vertically movable upper or lower mold and thereafter the cutter is pressed toward the carton at the adhesive surface thereof at the given position so that the attachment of the cutter can be automatically made without resorting to man power. Accordingly, it is possible to enhance the efficiency of the manufacturing process of the carton.

Col. 11, lines 46-56. (emphasis added). Okushita’s teaching of applying a pre-formed cutter runs directly contrary to Bergstein’s teaching of applying a strip of material to a carton and

then forming the cutting edge. Thus, a skilled artisan would not have found it obvious to use the cutter material of Okushita to form cutting strips by the method disclosed in Bergstein.

Furthermore, the technology disclosed in Bergstein is over 50 years old (Bergstein issued in 1953), yet there appears to be no evidence whatsoever in the prior art of record that polymeric tapes have been used in a similar process. The application of polymeric tape to form a cutting edge in the manner recited in claim 21 flies in the face of over 50-year-old technology. The fact that Okushita takes a much different approach for forming cutting elements from polymers than Applicants' method only reinforces that it would not have been obvious to use a polymeric tape in the Bergstein technique to form a cutting edge.

Accordingly, for at least the foregoing reasons, the method as set out in claim 21 is not rendered obvious by Bergstein and Okushita and is allowable.

Claims 22-24 and 28-31:

Claims 22-24 and 28-31 depend from claim 21 and are allowable for the reasons given above in support of claim 21 and because each dependent claim sets forth an independently patentable combination of features.

For example, claim 31 further specifies that the polymeric backing has a thickness between about 2 mils (0.05 mm) to about 7 mils (0.18 mm). The use of such a thin piece of tape to form an effective cutting edge is surprising and contrary to conventional wisdom in the art. See page 5, lines 18-19 of the application. In fact, Okushita actually teaches that the cutter should have a thickness of 0.2 to 0.5 mm, and even goes so far as to say that "if the thickness is less than 0.2 mm, the strength of the cutter is insufficient." Col 5, line 67 to Col. 6, line 2. The disclosure of Okushita clearly teaches against the use of polymeric tape having a thickness in the range recited in claim 31. Furthermore, MPEP § 2143.02 states that to establish a *prima facie* case of obviousness, the teachings of the prior art must provide a sufficient basis for a reasonable expectation of success. Okushita clearly teaches that there would not be an expectation of success from forming a nonmetallic cutter having a thickness of less than 0.2 mm.

**II. Rejection of Claims 25 and 35 Over Bergstein, Okushita, and Johnson**

Claims 25 and 35 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious from Bergstein, Okushita, and European Patent Application No. EP 776,848 A2 to Johnson

(Johnson). Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

Claims 25 and 35 depend from claim 21 and are allowable for the reasons given above in support of claim 21 and because each dependent claim sets forth an independently patentable combination of features.

### **III. Rejection of Claim 34 Over Bergstein, Okushita, and Kerr**

Claim 34 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious from Bergstein, Okushita, and US Patent No. 3,729,648 to Kerr (Kerr). Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

Claim 34 depends from claim 21 and is allowable for the reasons given above in support of claim 21 and because claim 34 sets forth an independently patentable combination of features.

### **IV. Rejection of Claims 21-24, 28-29, 31-32 and 36-37 Over Marcalus and Okushita**

Claims 21-24, 28-29, 31-32 and 36-37 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious from U.S. Patent No. 1,843,429 to Marcalus (Marcalus) and Okushita. Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

Unlike claim 21, Marcalus does not teach or suggest the use of a polymeric tape for forming a cutting edge or cutting a carton board and tape lengthwise to separate the carton board into carton blanks and form a carton edge on each carton blank. Instead, Marcalus teaches supplying a roll of indurated (hard) paper C (or stencil board), applying glue to the paper C as it is dispensed from the roll, pressing the paper against an edge portion of a carton blank, and shearing off the forward end of the material adhered to the blank to form a cutting edge on a single carton blank.

Okushita does not make up for the deficiencies of Marcalus. Okushita, like Marcalus, does not teach or suggest supplying a roll of tape having a polymeric backing coated with an adhesive, applying a length of the tape to a carton board and cutting the board and the tape to form a cutting edge, as recited in Claim 21. Instead, Okushita teaches forming a cutter from a

nonmetallic sheet S and thereafter adhering the cutter to carton board. See FIG. 6 and col. 8, lines 25-51.

In the rejection of Claim 21, the action contends that it would have been obvious to use polymeric tape in the Marcalus method because “Okushita et al. teach using a polymeric material or paper for a carton cutter and both Marcalus and Okushita et al. specifically recite these materials to be better than the art recognized metal alternative for improved wound prevention and incineration.” In reply, Applicants submit that even if Okushita renders obvious the use of polymeric material in the Marcalus method (which it does not), the combined teachings of Marcalus and Okushita do not suggest the specific method recited in claim 21.

As noted above, the Marcalus method involves applying an edge portion of paper C to an edge portion of a carton and shearing off the paper C from the rest of the roll. This process forms a single carton blank with a cutting edge, in contrast to claim 21, which requires cutting the carton board and tape to separate the carton board into separate carton blanks, each having a cutting edge. Thus, the use of a plastic material as taught by Okushita in the Marcalus method would not satisfy the limitations of claim 21.

Moreover, the teachings of Okushita undercut, rather than support, the presupposition that polymers can be used to form the cutting strips by the method disclosed in Marcalus. Marcalus teaches forming a cutting edge by adhering an edge portion of paper to a carton and then cutting the edge portion to form a cutting edge, while Okushita emphasizes the importance of forming the cutter first and then transferring and applying the pre-formed cutter to the carton. For example, with reference to the FIG. 6 embodiment, Okushita states:

the sheet is successively fed between the upper and lower molds and cut thereby and the cutter thus formed is sucked and held by the vertically movable upper or lower mold and thereafter the cutter is pressed toward the carton at the adhesive surface thereof at the given position so that the attachment of the cutter can be automatically made without resorting to man power. Accordingly, it is possible to enhance the efficiency of the manufacturing process of the carton.

Col. 11, lines 46-56. Okushita’s teaching of applying a pre-formed cutter runs directly contrary to Marcalus’ teaching of applying the cutter material to a carton and then forming the cutting edge. Thus, a skilled artisan would not have found it obvious to use the cutter material of Okushita to form cutting strips by the method disclosed in Marcalus.

Furthermore, the technology disclosed in Marcalus is over 70 years old (Marcalus issued in 1932), yet there appears to be no evidence whatsoever in the prior art of record that polymeric tapes have been used in a similar process. The application of polymeric tape to form a cutting edge in the manner recited in claim 21 flies in the face of over 70-year-old technology. The fact that Okushita takes a much different approach for forming cutting elements from polymers than Applicants' method only reinforces that it would not have been obvious to use a polymeric tape in the Marcalus technique to form a cutting edge.

Accordingly, for at least the foregoing reasons, the method as set out in claim 21 is not rendered obvious by Marcalus and Okushita and is allowable.

Claims 22-24, 28-29, 31-32 and 36-37 depend from claim 21 and are allowable for the reasons given above in support of claim 21 and because each dependent claim sets forth an independently patentable combination of features.

For example, claim 31 further specifies that the polymeric backing has a thickness between about 2 mils (0.05 mm) to about 7 mils (0.18 mm). The use of such a thin piece of tape to form an effective cutting edge is surprising and contrary to convention wisdom in the art. See page 5, lines 18-19 of the application. In fact, Okushita actually teaches that the cutter should have a thickness of 0.2 to 0.5 mm, and even goes so far as to say that "if the thickness is less than 0.2 mm, the strength of the cutter is insufficient." Col 5, line 67 to Col. 6, line 2. The disclosure of Okushita clearly teaches against the use of polymeric tape having a thickness in the range recited in claim 31. Furthermore, MPEP § 2143.02 states that to establish a *prima facie* case of obviousness, the teachings of the prior art must provide a sufficient basis for a reasonable expectation of success. Okushita clearly teaches that there would not be an expectation of success from forming a nonmetallic cutter having a thickness of less than 0.2 mm.

#### **V. Rejection of Claims 25 and 35 Over Marcalus, Okushita, and Johnson**

Claims 25 and 35 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious from Marcalus, Okushita, and Johnson. Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

Claims 25 and 35 depend from claim 21 and are allowable for the reasons given above in support of claim 21 and because each dependent claim sets forth an independently patentable combination of features.

**VI. Rejection of Claim 34 Over Marcalus, Okushita, and Kerr**

Claim 34 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious from Marcalus, Okushita, and Kerr. Applicants traverse this rejection and request that it be withdrawn because a *prima facie* case of obviousness has not been established.

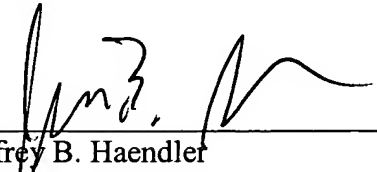
Claim 34 depends from claim 21 and is allowable for the reasons given above in support of claim 21 and because claim 34 sets forth an independently patentable combination of features.

**VII. Conclusion**

The present application is in condition for allowance and such action is respectfully requested. If any further issues remain concerning this application, the Examiner is requested to call the undersigned to discuss such matters.

Respectfully submitted,

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